

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 December 2005 (15.12.2005)

PCT

(10) International Publication Number  
**WO 2005/119439 A2**

(51) International Patent Classification<sup>7</sup>: **G06F 9/45**

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(21) International Application Number:  
PCT/US2004/032352

(22) International Filing Date:  
30 September 2004 (30.09.2004)

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(25) Filing Language: English

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data:  
60/576,643 1 June 2004 (01.06.2004) US

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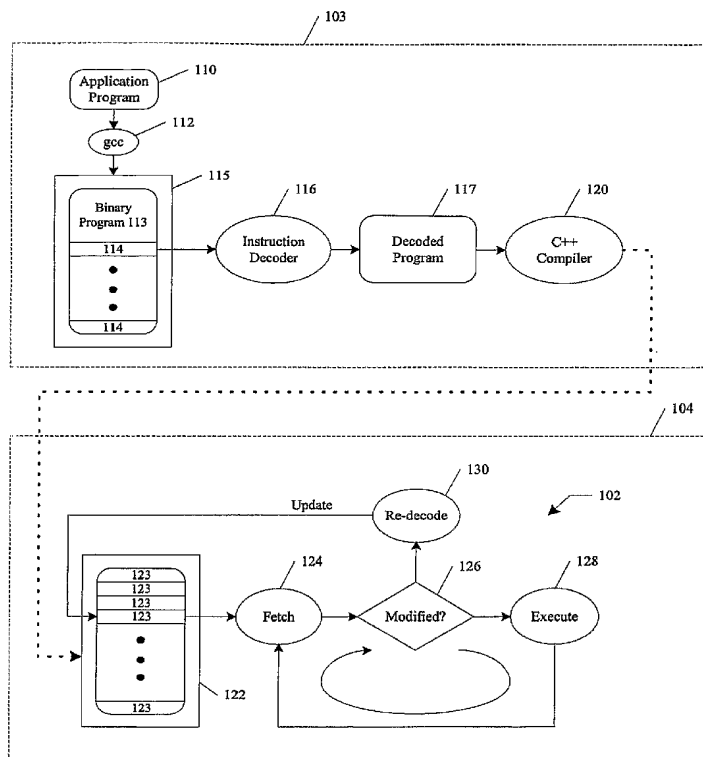
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(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH,

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[Continued on next page]

(54) Title: RETARGETABLE INSTRUCTION SET SIMULATORS



(57) Abstract: Methods for simulating an instruction set architecture (ISA) with an instruction set simulator (ISS) are provided. One exemplary embodiment of the methods includes fetching a first decoded instruction during a run time, where the decoded instruction is decoded from an original instruction in a target application program during a compile time preceding the run time. The decoded instruction can designate a template configured to implement the functionality of the original instruction. The method also preferably includes determining whether the fetched instruction is modified from the original instruction and then executing the designated template if the instruction was not modified. The method can also include decoding the original instruction during the compile time by selecting a template corresponding to the original instruction and then customizing the template based on the data in original instruction. The method can also include optimizing the customized template during the compile time.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *without international search report and to be republished upon receipt of that report*

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